Waste Reduction Goal Task Force BRIEFING PAPER For COMPOSTING and MULCHING

Background:

In increasing numbers, communities throughout the nation are relying on composting and mulching to divert materials from landfills, reduce pollution, and lower waste management costs. Composters are converting a wide variety of otherwise wasted materials into safe, valuable, and marketable soil amendment products. Mulching of yard wastes not only saves landfill space but provides a valuable product for use in landscaping and erosion prevention.

Composting – The controlled decomposition of solid organic waste by microorganisms under aerobic and/or anaerobic conditions which results in a stable humus-like material free of pathogenic organisms. As examples, the City of Memphis has a composting facility that takes bagged leaves, grinds them, places them in outdoor windrows where they are subjected to the elements, and regularly aerates them for 6-8 months. Sevier County used a bioconversion digester capable of handling the county's total volume of solid waste, reducing it to usable compost, extracting the metals for recycling, and landfilling a small residual amount of waste in a local Class I landfill. Recently a fire has temporarily disabled this facility causing the county scramble seek outside contracts to manage their Class I solid waste and shortening the lifespan of the Class I landfill from seven (7) years down to 20 days. The county is currently moving forward with plans that were already in the works to change locations and expand the composting operation. One last example is Knox County accepting organic materials from several sources including the local zoo as well as yard trimmings producing a high quality compost as a beneficial new product.

Backyard Composting:

More than half the trash a family throws away is organic and can be composted to turn it back into rich, fertile soil. There are several low-tech processes that individuals can use. Several local governments have implemented home composting programs. The problem with this program is that the amounts can never be quantified and is difficult to follow up on due to the small amounts of waste processed and the lack of formal communication between the local governments and the individuals using this process.

<u>Mulching</u> – The process by which the volume of organic yard waste (brush, tree limbs, etc.) can be reduced by grinding or shredding. Many cities and counties in Tennessee use this process. The resulting product can either be sold or given to the general public or to commercial businesses for use in landscaping or erosion control. Mulched materials may also become a component of compost when processed accordingly.

Many Tennessee cities and counties have acquired chippers for mulching yard wastes through the division's recycling equipment grant program.

Issues:

To be determined by the Task Force

Focus Questions:

- 1. Should composting and mulching be a part of the mandated municipal solid waste region's waste reduction goal? To what extent?
- 2. Should composting and mulching be considered as part of a completely separate waste goal or diversion effort?
- 3. Should an option within the statewide goal include composting and mulching? How would infrastructure be funded? What implementation role would the Department of Environment and Conservation have with programs and projects composting and mulching programs?
- 4. Should economic incentives and disincentives (implementing or decreasing/increasing tipping fee surcharges for landfills) be considered in dealing with compostable materials?
- 5. Should any determined goal apply to public/private entities equally? Should they apply equally to county and municipal governments?
- 6. Should all compostable or mulch-able materials be considered for recycling diversion and recycling?